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[57] ABSTRACT

A reduced area delay circuit and method are disclosed. The delay circuit uses a constant current source and a constant current drain to charge and discharge a capacitor and thus control the delay time of the delay circuit. The constant current source and drain can be implemented using current mirrors formed by configuring MOSFET transistors in a common source configuration. The delay circuit method includes the steps of receiving an input signal, delaying the input signal by using a constant current source or drain in combination with a capacitor, and then buffering the voltage on the capacitor using two inverters. A programmable delay circuit is also disclosed by adding additional pairs of current mirrors to the delay circuit and selectively enabling the pairs to adjust the delay time.

15 Claims, 2 Drawing Sheets

FOOTNOTES